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The National Standard of People's Republic of China

GB10133-200X
Substitutes for GB10133 to 10135-1988 and GB10137-1988

Hygienic Standard for Aquatic Flavoring
(Draft for approval)

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Introduction

This standard will substitute “Hygienic Standard of Shrimp Paste” in GB10133-1988, “Hygienic Standard of Fish Sauce” in GB 10134-1988, “Hygienic Standard of Shrimp Sauce” in GB10135-1988 as well as “Hygienic Standard of Oyster Sauce and Mussel Sauce” in GB10137-1988.

Comparing this standard with GB10133-1988, GB10134-1988, GB10135-1988 and GB10137-1988, there are some main modifications as follows:

The standard text form is modified according to GB/T1.1-2000:

The original four standards have been combined into this standard.

The structure of the original standard was modified. It has been added with the requirement of definition, raw material, food additives, hygienic requirement for the process of production, packing, transportation and storage.

Change the “applied scope” into: “Taking the fish, shrimp, crab and shellfish as the main material to make the aquatic flavoring through corresponding process”.

It is added with the requirements of cadmium, inorganic arsenic and polychloride biphenyl. In the item of pathogenic bacteria, it is noted that para-hemolytic vibrio should not be detected.

In the item of “Total colonies count”, it is modified as ≤ 8000 cfu/g. In the item of “Pathogenic bacteria must not be detected”, it is changed as: Salmonella, Shiga’s bacillus, Staphylococcus aureus and para-hemolytic vibrio must not be detected.

At the time of adoption, the standards GB10133-1988, GB10134-1988, GB10135-1988, and GB10137-1988 shall be automatically annulled.

This standard is proposed and controlled by the Ministry of Public Health of the People’s Republic of China.

This standard is drafted by: Fujian Sanitation and Antiepidemic Station, Liaoning Food Hygienic Supervision and Testing Institute, Ningbo Sanitation and Antiepidemic Station, Shantou Sanitation and Antiepidemic Station.

This standard is drafted by: Sha Jihui, Lin Shengqing, Wang Zheng, Ji Ling and Ni Benzhou.

This standard substitutes versions of the following standards:
GB10133 to 10135-1988 issued first in 1988. This is the first modification.

GB10133-200X

Hygienic Standard for Aquatic Product Flavoring

1 Scope

This standard specifies the definition of aquatic flavoring, standard requirement, usage requirement of food additives, hygienic requirement in the process of production, marking, packing storage, transportation and checking method.

This standard is applied to aquatic flavoring that takes fish, shrimp, crab, and shellfish as the main raw materials and are made through corresponding process.

2 Relevant Documents

The clauses in the following documents have been quoted and become provisions of this standard. For those quoted documents with dates, their modifications (not including corrections on printing errors) and revised versions do not apply to this standard. However, parties having reached the agreement based on this standard are encouraged to study whether the latest versions of the documents are applicable. For quoted documents without dates, their latest versions apply to this standard.

GB 2760	Hygienic standard of the usage of food additive
GB/T4789.22	Microbiological checking for food hygiene and checking for the flavoring
GB/T5009.11	Determination of total arsenic and inorganic arsenic in foods
GB/5009.12	Determination of lead in food
GB/5009.15	Determination of cadmium in food
GB/5009.39	Analytic method for hygienic standard of soy sauce
GB/5009.190	Determination of polychlorinated biphenyl in foods
GB14881	General hygienic specification for food enterprise
SC/T3009	Aquatic product processing management specifications

3 Terminology

3.1 Fish sauce

It is a kind of fluid flavoring made by taking fish and shellfish as the main materials and using salt to preserve it through natural fermentation, extraction and refinement.

3.2 Oyster sauce (mussel oil)

It is a kind of product that takes the oyster and mussel as the raw material made through cooking and extracting its concentrated sauce and then, adding some auxiliary flavoring.

3.3 Shrimp sauce

It is a kind of product that takes the shrimp as the raw material to be made by using salt to preserve it through natural fermentation, extraction and filtration.

3.4 Shrimp paste

It is a kind of product that takes the shrimp as the raw material to be made by using salt to preserve it through natural fermentation.

3.5 Crab paste

It is a kind of product that takes the fresh crabs as the raw material to be made by cleaning the crabs with water and removing off the cram shell, gill and cram feet, added with salt, crashed the crabs and kept for preservation through fermentation or without fermentation.

4 Index Requirements

4.1 Requirement of raw materials

The raw materials of fish, shrimp, crab and shellfish should be in compliance with relevant regulations.

4.2. Sensory indexes

The sensory index requirement should conform to those listed in Table 1.

Table 1 Requirement of Sensory Indexes

Indexes	Requirement
Color	Showing the natural and specific color of the product.
Taste and smell	Showing the specific smell and taste of the product and without any abnormal smell.
Impurities	Without any impurities.

4.3 Standards of physicochemical indexes

As to the physicochemical standard, it should be accorded with table 2.

Table 2. Physicochemical standard

Indexes		Standard
Total acidity (counted as lactic acid), g/100 ml	≤	1.2
Nitrogen in the form of amino acid g/100g Fish oil, fish sauce and shrimp paste Crab paste Oyster sauce	 ≥ ≥ ≥	 0.6 0.4 0.3
Inorganic arsenic, mg/kg Fish flavoring Other flavoring	 ≤ ≤	 0.1 0.5
Cadmium (Cd), mg/kg Fish flavoring Shrimp and crab flavoring Other aquatic flavoring	 ≤ ≤ ≤	 0.1 0.5 1
Polychloride biphenyl[a], mg/kg PCB138,mg/kg PCB153,mg/kg	≤ ≤ ≤	2.0 0.5 0.5
[a] It is only limited within the sea product flavoring and it is counted as the total amount of PCB28, PCB 52, PCB101, PCB118, PCB138, PCB153 and PCB180.		

4.4 Standards of Microbiological Indexes

It should be coincided with the regulations in table 3.

Table 3 Microbiology standard

Indexes		Standard
Total colonies count, cfu/g	≤	8000
Coli bacillus flora, MPN/100g	≤	30
Pathogenic bacteria (Salmonella, Staphylococcus aureus, Para-hemolytic vibrio, Shiga's bacillus)		Must not be detected

5 The requirement for the use of food additives

The requirement for the use of food additives should be accorded with the regulation in GB2760.

6 Hygienic requirements in the process of production

Should conform to regulations in GB14881 and SC/T3009.

7 Packing

The packing container and its material should be accorded with the corresponding hygienic standard and regulations.

8 Marking

8.1. Marking should conform to the relevant regulations.

9 Storage and transportation

9.1 Storage

The product should be stored in a clean, dry, shady and ventilated place. It should be avoided with sunshine, rain and heat. In the warehouse, it should be placed with shelves and mouse catching equipment. It is not allowed to store the product together with the items that are poisonous, harmful, with bad smell in the same warehouse.

9.2 Transportation

The transportation vessel should be kept clean and it is not allowed to mix with items that are poisonous, harmful, with bad smell during transportation. It should be covered during transportation to avoid sunshine, rain and heat.

10. Inspection methodology

10.1 Requirements of for sensory inspection

Put a sample of over 20ml. or 200g of the product into a colorless beaker to observe it under the natural light with eyes, smell it with nose and taste it with mouth.

10.2. Physical and chemical inspection

10.2.1 Nitrogen in the form of amino acid and total acidity:

It should be tested according to the method in GB/T5009.39.

10.2.2 Inorganic arsenic

It should be determined according to the method in GB/T5009.11.

10.2.3 Lead

It should be determined according to the method in GB/T T5009.12.

10.2.4 Cadmium

It should be determined according to the method in GB/T T5009.15.

10.2.5 Polychlorinated biphenyl

It should be determined according to the method in GB/T T5009.190.

10.3 Microbiology inspection:

Should be examined according to the method in GB/T4789.22.